Title (en)
METHOD FOR SIMULATING TIRE NOISE PERFORMANCE AND METHOD FOR MANUFACTURING TIRE

Title (de)
VERFAHREN ZUR SIMULATION DER REIFENGERÄUSCHLEISTUNG UND HERSTELLUNGSVERFAHREN FÜR EINEN REIFEN

Title (fr)
PROCÉDÉ DE SIMULATION DES CARACTÉRISTIQUES DU BRUIT D'UN PNEU ET PROCÉDÉ DE FABRICATION D'UN PNEU

Publication
EP 2241456 A1 20101020 (EN)

Application
EP 08870173 A 20081028

Priority
- JP 2008069554 W 20081028
- JP 2008002460 A 20080109

Abstract (en)
The noise performance of a tire is estimated with satisfactory accuracy. A method for simulating tire noise performance using a computer includes a step S1 of setting, using a finite number of elements, a tire model having a tread model portion provided with a tread groove, a step S2 of setting a road surface model using a finite number of elements, a step S4 of carrying out a rolling simulation to roll the tire model on the road surface model at least over a groove-grounded rolling distance between which the tread groove is brought into contact with the road surface model and out of contact therewith; a step S5 of acquiring a surface coordinate value of the tread model portion at least in the groove-grounded rolling distance in a time-series manner, and a step S7 of setting a sound space region around the tread model portion using the surface coordinate value of the tread model portion and of carrying out an aerodynamic simulation using the sound space region.

IPC 8 full level
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CPC (source: EP US)
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Cited by
EP2650806A3; EP3632710A4; EP2728553A3; CN113886991A; LU92447B1; EP2684713A3; EP2960080A1; CN105224711A; US10005328B2

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DOCDB simple family (publication)
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